

What is claimed is:

1. An apparatus for imparting an electric charge to free-fibers, comprising:  
(a) a fiber-forming device capable of producing free-fibers;  
5 (b) a spraying mechanism positioned to spray a polar liquid on free-fibers;  
(c) a collector positioned to collect free-fibers in the form a nonwoven fibrous web; and  
(d) a drying mechanism positioned to actively dry the free-fibers and/or the nonwoven fibrous web.

10 2. The apparatus of claim 1, wherein the fiber-forming device is an extruder.

15 3. The apparatus of claim 1, further comprising an apparatus for producing a high-velocity gaseous stream that is capable of directing the stream of free-fibers to the collector.

20 4. The apparatus of claim 1, wherein the spraying mechanism is configured to spray perpendicular to a stream of free-fibers.

25 5. The apparatus of claim 1, wherein the spraying mechanism is configured to spray an atomizing spray.

6. The apparatus of claim 1, wherein the spraying mechanism is capable of spraying at a pressure of about 30 kPa to about 3500 kPa.

7. The apparatus of claim 1, wherein the fiber-forming device is capable of producing melt-blown microfibers.

30 8. The apparatus of claim 1, wherein the spraying mechanism is capable of spraying at a pressure of about 500 kPa to about 800 kPa.

9. The apparatus of claim 1, wherein the spraying mechanism is capable of spraying from multiple sides of a stream of free-fibers.

10. The apparatus of claim 1, wherein the spraying mechanism located less than one foot laterally from the free fiber and less than one-half foot downstream from the fiber-forming device.

11. The apparatus of claim 1, wherein the drying mechanism includes a heat source.

12. The apparatus of claim 1, wherein the drying mechanism includes a vacuum source.

13. The apparatus of claim 1, wherein the drying mechanism includes a stream of a heated drying gas.

14. The apparatus of claim 1, wherein the drying mechanism includes a mechanism for mechanically removing liquid.

15. The apparatus of claim 1, which consists essentially of parts (a) - (d).

16. The apparatus of claim 1, which is composed of parts (a) - (d).